

## CLAIMS

1. A portable gun, such as revolvers, pistols, carbines, riffles and hand machine guns, among others that has a handle capable of establishing a first level of owner recognition, **characterized** in that it is possible to restrict to a group of persons the successful shooting process of a portable gun when their grip force is superior to an established threshold.

2. A portable gun, according to claim 1, **characterized** in that the persons with grip force bellow the established bottom limit can grab a gun and try to actuate the trigger, but the safety device will not be activated and the action will be unsuccessful.

3. A portable gun, according to claim 1, **characterized** in that the minimum grip force for successful shooting is established by material deformation, since the coating material of the grasping handle will be produced with a determined resistance that only when an established threshold grip force is surpassed, the trigger unlocking will occur.

4. A portable gun, according to claim 1, **characterized** in that the minimum grip force for successful shooting is established by a strain gage and stored by a chip, both connected by an electronic circuit, all installed inside the gun handle.

5. A portable gun, according to claim 1, **characterized** by the fact that the strain gage is placed either in the frontal part of the handle in the ergonomic position of the "greater" finger of the hand used to hold the gun, or in the posterior part of the handle in the ergonomic position of the part of hand palm correspondent to the thumb, or even in the right lateral part of the handle, for dextral shooters, or the left lateral part of the handle, for left-handed shooters, in the ergonomic position of the hand palm used to hold the gun.

6. A portable gun, according to claim 1, **characterized** in that the trigger unlocking is done by a secondary safety pin,

always in blocking position, to be released as long as the grip force allows its liberation.

7. A portable gun, such as revolvers, pistols, carbines, riffles and hand machine guns, among others that has a handle capable of establishing a second level of owner recognition, **characterized** in that it is possible to restrict to an even smaller group of persons the successful shooting process of a portable gun when their grip force fit into a small operational range, established according the average grip force of the owner and the width of his normal distribution.

8. A portable gun, according to claim 7, **characterized** in that persons with grip force outside of the small operational range can grab a gun and try to actuate the trigger, but the safety device will not be activated and the action will be unsuccessful.

9. A portable gun, according to claim 7, **characterized** in that the small operational range is established by a strain gage and stored by a chip, both connected by an electronic circuit, all installed inside the gun handle.

10. A portable gun, according to claim 7, **characterized** in that the strain gage is placed either in the frontal part of the handle in the ergonomic position of the "greater" finger of the hand used to hold the gun, or in the posterior part of the handle in the ergonomic position of the part of hand palm correspondent to the thumb, or even in the right lateral part of the handle, for dextral shooters, or the left lateral part of the handle, for left-handed shooters, in the ergonomic position of the hand palm used to hold the gun.

11. A portable gun, according to claim 7, **characterized** in that at acquisition the owner will hold the handle as many times it is necessary to compute and store his average grip force and the width of his normal distribution.

12. A portable gun, according to claim 7, **characterized** in that only when a grip force is within the force range stored in

the chip, the trigger unlocking will occur and a secondary safety pin, always in blocking position, will be released.

13. A portable gun, such as revolvers, pistols, carbines, riffles and hand machine guns, among others that has a handle capable of establishing a third level of owner recognition, **characterized** in that it is possible to restrict to only one individual the successful shooting process of a portable gun, based on the establishment of as many as necessary (in this case it is considered six) average local grip forces by the owner and the same number (six) of widths of his normal distributions.

14. A portable gun, according to claim 13, **characterized** in that any person different from the owner can grab the portable gun and try to actuate the trigger, but the safety device will not be activated and the action will be unsuccessful.

15. A portable gun, according to claim 13, **characterized** in that it is possible to restrict to only one individual the successful shooting process of a portable gun based on the establishment of six average local grip forces by the owner, since the portable gun will only recognize for a successful firing an individual whose different local grip forces fit into the different stored small local operational ranges.

16. A portable gun, according to claim 13, **characterized** in that the six local operational ranges are established by six strain gages and stored by a chip, all of them connected by an electronic circuit, all installed inside the gun handle.

17. A portable gun, according to claim 13, **characterized** in that the six strain gages are placed either in the frontal part of the handle in the ergonomic position of the three fingers of the hand used to hold the gun, in the posterior part of the handle in the ergonomic position of the part of hand palm correspondent to the thumb, and even in the right lateral part of the handle and in the left lateral part of the handle in the ergonomic position of the hand palm used to hold the gun; in

this way the gun is safe either for dextral or left-handed shooters a dextral shooter will have zero grip force measured at the left lateral part of the handle and vice-versa for the left-handed shooter.

18. A portable gun, according to claim 13, **characterized** in that the gun will recognize his owner because at the moment of acquisition he will hold the handle as many times as it is necessary to compute and store his average local grip forces and the widths of his normal distributions.

19. A portable gun, according to claim 13, **characterized** in that only when each local grip force is within the local operational force range stored in the chip, the trigger unlocking will occur and a secondary trigger safety pin, always in blocking position, will be released.